

APPENDIX A



Downey Police Department

SMS Text-to-9-1-1 via TTY/TDD

Test Results

January 8, 2014

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Test Cases

1. Verify PSAP procedures in place when non-test SMS 9-1-1 text is delivered
2. Verify test 9-1-1 SMS text is delivered to correct PSAP and rebid capability
3. Verify action if PSAP does not respond to test 9-1-1 SMS text
4. Verify 2 simultaneous SMS 9-1-1 text can be handled by one call taker
5. Verify bounce back message delivered when third 9-1-1 SMS text is sent
6. Verify text conversation is still up if cell phone is powered down and powered up
7. Verify texter receives bounce back if standing inside Downey PD's jurisdiction but Cell tower centroid is in different PSAP jurisdiction
8. Verify 9-1-1 SMS text will be delivered to Downey PD if texter is standing outside Downey PD's jurisdiction but the cell tower centroid is within Downey PD's jurisdiction.
9. Verify 9-1-1 SMS texter receives a bounce back when added to deny list
10. Verify 9-1-1 SMS texter receives a bounce back when PSAP has provisioned a Time of Day.
11. Verify ability for second call taker to take over SMS text session.
12. Verify bounce back is received when both trunks are busy
13. Verify transfer capability from CSU LB PD to Downey PD
14. Verify results when texter send more than 160 characters and verify results when sending symbols not supported in TTY
15. Verify SMS texts to 9-1-1 sessions are being recorded in ECaTS

CASE #1	Non test Text is sent to Downey PD
Objective/ Description	This test verifies that when Downey PD receives a non-test text they will manually send canned bounce back response Text (when service is not available)
Resources	Texter in field and centroid within Downey PD's jurisdiction. Call taker to receive text TCS to monitor text session
Test Setup	1. Verify Texter is ready 2. Send test SMS 9-1-1 Text to verify bounce back (from Verizon Wireless) 3. Verify TCC is provisioned and ready 4. Verify the target PSAP is available. 5. Verizon Wireless/TCS turn on 9-1-1 texting for Downey PD
Procedure	1. Text message "I have a flat tire" 2. Call taker should recognized this is not part of our testing (because the text does not start with this "is a test") and reply back with the canned bounce back message (should be same message they would see from Verizon Wireless) 3. PSAP to end text session.
Verification	1. Verify bounce back received from Verizon Wireless on initial test 2. Once service is activated verify canned bounce back is sent by PSAP. 3. Verify release text received by Texter.
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP Test text from 916-202-XXXX Call taker could hear tones, no TTY screen automatically populated, no ANI/ALI, but line is active. Call taker launched the TTY window manually and sent a message to texter. Texter received message. End session initiated by Downey PD.</p> <p>Performed test with TTY machine. TTY screen launched automatically in the Vesta.</p> <p>Test text from 916-202-XXXX at 09:20:50 Appeared at call taker workstation trunk 235 at 09:21:10 Call taker allowed two rings so ANI would appear. Heard tones but did not receive initial text message from texter, received ga only. Following messages were sent and received fine between call taker and texter. End session initiated by Downey PD. (Launches TTY but does not allow first text to come across on the TTY screen. Questioned as to whether the standard TTY 4 spaces are being sent on the first text. TCS confirms that first text is received at the TCC.)</p> <p>Test text from 562-233-XXXX Texter placed at least 4 spaces prior to the text message verbiage. Received at the call taker workstation trunk 170 TTY screen launched automatically, received "te" of initial message. Screen went to TTY disabled immediately and call taker could not respond. Texter can send messages and they are received by the call taker. Call taker cannot respond. End session initiated by Downey PD.</p> <p>Test text from 562-233-XXXX at 09:35:21</p>

	<p> Texter sent 4 spaces and a text message. Received at the call taker workstation trunk 235 and auto launched TTY screen. Received "This" of the initial text in the TTY screen prior to auto reply. Auto reply message is sent to texter, interrupting the initial incoming text. End session initiated by Downey PD. </p> <p> Test text from 562-233-XXXX Texter sent 4 spaces only. Received at the call taker workstation and auto launched TTY screen. Auto reply message is sent to texter. Call taker TTY screen disabled after first auto message was sent. End session initiated by Downey PD. </p> <p> Verizon technician disabled the auto launch feature in the CPE. </p> <p> Test text from 916-207-XXXX at 09:43:54 Appeared at call taker workstation trunk 170 at 09:44:22 Tones were heard and call taker answered after 2 rings when ANI appeared. ANI and ALI received and call taker manually launched TTY screen. Automatic message was sent and received by texter. First text from texter does not appear on call taker screen. End session initiated by Downey PD. </p> <p> Test text from 916-207-XXXX at 09:47:20 Appeared at call taker workstation trunk 235 at 09:47:47 Texter sent 4 spaces and "This is a test." Tones were heard; call taker answered after 2 rings and manually launched TTY. First text from texter not received, auto message sent from TTY screen. Texter received and replied "Test 2", call taker received and replied. Several messages were exchanged and TTY screen did not disable. End session initiated by Downey PD. </p> <p> Verizon technician enabled the auto launch feature in the CPE. </p> <p> Test text from 916-207-XXXX Texter sent 4 spaces and "Test 1" Received at the call taker workstation trunk 170, answered at the second ring with ANI/ALI. TTY window automatically launched and received only "Test". Auto message sent from TTY screen and received by texter. Texter sent "Test2", call taker received "Test2 ga" and replied "Calm down". Texter sent "Test 3" with space between words. Call taker TTY screen disabled and did not receive "Test 3". End session initiated by Downey PD. </p> <p> Test text from 916-207-XXXX at 09:54:25 Appeared at call taker workstation trunk 235 at 09:54:41 Texter sent "Test 4" with no spaces in front. Heard tones and received ANI/ALI upon answer, but the TTY screen did not launch automatically. Manually launched TTY screen, no first text received. Automatic message sent from TTY screen and received by texter. Texter sent "Test 5", call taker received and replied "What is your location ga?" Texter received and sent "Test 6", call taker received and replied "Help is on the way ga". Texter received and sent "Test 7". Call taker TTY screen disabled and call taker not able to respond. End session initiated by Downey PD. </p> <p> Test call made with TTY machine and are working fine, not disabling TTY screen. </p>
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Test text from 916-207-XXXX at 10:04:57
 Texter sent "Test 8" with no spaces in front.
 Appeared at call taker workstation trunk 170 at 10:05:21 and answered.
 TTY screen launched at 10:05:33, initial text not received, automatic message sent.
 Texter sent "Test 9" at 10:06:00, call taker received at 10:06:15.
 Call taker replied "Don't hang up ga" and "What is the location of the emergency?".
 Texter received and replied "Text 10" at 10:06:53.
 Call taker received and replied "What type of vehicles are involved".
 Texter received and replied "Text 11" at 10:07:47.
 Call taker received and replied "What direction was the suspect last seen going?"
 Texter received and replied "Text 12" at 10:09:14.
 End session initiated by Downey PD.

All messages received ok, TTY screen did not become disabled for call taker.

TCS made a change in the system to incorporate the initial 4 spaces automatically into the first text message sent.

Test text from 916-207-XXXX at 10:16:50
 Texter sent "Test 13" with no spaces in front.
 Appeared at call taker workstation trunk 235 at 10:17:08 and answered after 2 rings, TTY screen automatically launched.
 Call taker received only "TEST" and automatic message is sent.
 Automatic message begins garbled and sent "pkaqag what is ur emergency q ga".
 Texter received the same garbled message and replied "Test 14".
 Call taker received and replied "What is the location of the emergency?".
 Texter received and replied "Test 15."
 Call taker received and replied "What is your name and cell phone number?".
 Texter received and replied "Test 16 a little more data".
 End session initiated by Downey PD.

Test text from 916-207-XXXX at 10:23:21
 Texter sent "Test 17" with no spaces in front.
 Appeared at call taker workstation trunk 170 at 10:23:47 and answered after 2 rings, TTY screen automatically launched.
 Call taker received only "TEST" and the auto reply message began.
 Call taker TTY screen disabled immediately and automatic reply message was cut off.
 Texter received only the letter "m" in reply.
 End session initiated by Downey PD.

Test text from 916-207-XXXX
 Texter sent "Test 18" with no spaces in front.
 Appeared at call taker workstation trunk 235 and answered after 2 rings, TTY screen automatically launched.
 Call taker received only "TEST" and the auto reply message then was sent.
 Texter received "CGAT is you emergency q ga" instead of "What".
 End session initiated by Downey PD.

Test text from 916-207-XXXX at 10:33:00
 Texter sent "Test 19" with no spaces in front.
 Appeared at call taker workstation trunk 170 at 10:33:21 and answered after 2 rings, TTY screen automatically launched.
 Call taker received only "TEST" and automatic message is sent.
 "9-1-1 What is ur emergency q ga"
 Texter received "UX2T" instead of "What" and did not receive "9-1-1" in front of "what" in the message received.
 Texter replied "Test 20", call taker received message and replied "What is the location of the emergency?".

	<p> Texter received and replied "Text 21". Call taker received and replied "What is your name and cell phone number?". Texter received and replied "Test 22. I need help". Call taker received and replied "Is anyone injured? Are paramedics/fire needed?". Texter received and replied "Test 23". End session initiated by Downey PD. </p> <p> Verizon technician removed the verbiage on the automatic reply. The automatic reply function could not be disabled completely, but the verbiage could be removed, leaving the automatic reply blank. Call taker logged off and on again. </p> <p> Test text from 916-207-XXXX at 10:40:13 Texter sent "Test 24" with no spaces in front. Appeared at call taker workstation trunk 235 at 10:40:41 and answered after 2 rings, TTY screen automatically launched. Call taker received "Test 24 GA" and no automatic reply was sent. Call taker manually responded "9-1-1 need police fire ambulance q ga". Texter received and replied "Test 25. A little more data". Call taker and texter exchanged several messages back and forth. End session initiated by Downey PD at about 10:46:15. </p> <p> Test text from 916-207-XXXX at 10:46:34 Texter sent "Test 28." with no spaces in front. Appeared at call taker workstation trunk 170 at 10:47:00 and answered after 2 rings, TTY screen automatically launched. Call taker received "Test 28. GA" and no automatic reply was sent. Call taker manually responded "9-1-1 need police fire ambulance q ga". Texter received and replied "Test 29. More data data data". Call taker and texter exchanged several messages back and forth. End session initiated by Downey PD. </p> <p> Messages are now being sent and received consistently with the first message from the texter being received by the call taker, the automatic reply message field is blank, and TCS has injected the initial 4 spaces into the system. </p> <p> Texter does not type "GA" into the messages sent, but call taker receives the "GA" when receiving the complete message. It is being automatically injected and appears within the TTY screen. Texter also sees the "GA" on the messages received from Downey PD. </p> <p> Test text from 916-207-XXXX at 10:56:07 Texter sent "Test 31". Appeared at call taker workstation trunk 235 at 10:56:35 and answered immediately upon appearance. No ANI/ALI received, but TTY screen automatically launched and first text was received by call taker. Call taker replied. End session initiated by Downey PD. </p> <p> Test text from 916-207-XXXX at 10:59:09 Texter sent "Test 33". Appeared at call taker workstation trunk 170 at 10:59:29 and answered immediately upon appearance. No ANI/ALI received, but TTY screen automatically launched and first text was received by call taker. End session initiated by Downey PD. </p> <p> Verizon technician listened from the back room during the prior two test calls and could hear the ANI digits immediately upon wink. The ANI is hitting the back room immediately but not making it to the workstation until the second ring on the TTY text calls. </p>
Analysis	

CASE #2	Texter send 9-1-1 SMS text and routes to Downey PD
Objective/Description	This test verifies Text can be delivered to Downey PD and rebid for location is functioning.
Resources	Texter in field and centroid within Downey PD's jurisdiction. Verizon cell phone with location agent activated Call taker to receive text TCS to monitor text session
Test Setup	1. Verify Texter is ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Send a SMS text (starts with this is a test) to 911 to initiate a dialog. 2. Respond to the incoming RFA at the PSAP and send a few messages back and forth between the PSAP and texter. 3. After 20 seconds rebid for location. 4. PSAP ends text session.
Verification	1. Verify the RFA is received by the PSAP configured for this test case. 2. Verify the transcript is received by the PSAP when the dialog connected, and location information is properly displayed and call back number displayed. 3. Verify all messages sent by the PSAP are sent to the mobile handset. 4. Verify all messages sent by the mobile are received by the PSAP. 5. verify lat/long changes from centroid to actual location of texter 6. Verify release text received by Texter.
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP Test text from 949-677-XXXX at about 11:30:30 Appeared at call taker workstation trunk 235 at about 11:30:50 and answered after 2 rings, TTY screen automatically launched. Call taker and texter exchanged several messages back and forth. ALI course location 33.94129500, -118.134248, uncertainty 1552 meters Rebid at 11:32:10 → no change Rebid at 11:32:58 → no change Rebid at 11:33:50 → updated location received 33.94104800, -118.128712, uncertainty 19 meters End session initiated by Downey PD.</p> <p>Test text from 949-677-XXXX at about 11:37:48 Appeared at call taker workstation trunk 170 at about 11:38:12 and answered after 2 rings, TTY screen automatically launched. Call taker and texter exchanged several messages back and forth. ALI course location 33.94129500, -118.134248, uncertainty 1552 meters Rebid at 11:40:20 → no change, not initiating on phone Rebid at 11:40:44 → no change, did initiate on phone Rebid at 11:41:08 → no change Rebid at 11:41:50 → no change Rebid at 11:42:28 → no change Rebid at 11:42:59 → updated location received 33.94099400, -118.128647, uncertainty 8 meters End session initiated by Downey PD.</p>

	TCS was able to see timeouts within their system. It appears as though the rebid request initiates the action on the phone, but does not process the information fast enough to display it at the workstation. Once the phone completes the request and the precise location is stored, a subsequent rebid will pull the now cached precise location and display it to the call taker. More testing is likely necessary to verify this scenario as typical.
Analysis	Was location populated in CAD? Per Downey PD location was populated in CAD The initial phase 1 location was populated in CAD. Downey PD doesn't believe they checked to see if it changed after the rebid. Downey PD recalls manually entering the lat long coordinates into their Pictometry mapping system both upon answer, and after the rebids, and the location was updated accurately

CASE #3	Texter sends SMS to 911, TCS TCC receives and provides routing instruction, Route to PSAP – Downey PD does not respond to text
Objective/Description	This test verifies that TCC responds to an initial text that is not responded to by the PSAP with a canned message.
Resources	Texter in field within Downey PD's jurisdiction. Call taker to receive text TCS to monitor text session Timer to time send receive time
Test Setup	1. Mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Send a SMS to 911 to initiate a text session. 2. PSAP does not respond to initial text 3. After ?? seconds TCC send canned message to Texter. If PSAP and Texter converse a couple of times and the PSAP goes silent for ?? seconds, will a canned message be sent to Texter?
Verification	1. Verify the RFA is received by the PSAP configured for this test case. 2. Verify the transcript is received by the PSAP when the dialog connected 3. Verify PSAP non response message received by Texter
Text time	Send to receive:
Notes	Skip this test case. TCS currently does not have the functionality to send a bounce back message if the 911 text is not responded to by the PSAP within a set period of time.
Analysis	

CASE #4	Two simultaneous SMS Text 911 from different users, Routed to Downey PD
Objective/Description	This test verifies that TCC can process the scenario of initiating two dialogs from different texters with the delivery of the messages to Downey PD.
Resources	2 SMS Texters 1 9-1-1 Call Taker 2 timers
Test Setup	1. Two mobile phones activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Initiate two dialogs by sending a SMS to 911 from two different mobile handsets simultaneously. 2. Respond to the two incoming RFAs at the PSAP and send a few messages back and forth between the PSAP and texter. 3. PSAP ends text session.
Verification	1. Verify that both RFAs are received by the PSAP configured for this test case. 2. Verify the transcript for each dialog is received by the PSAP 3. Verify all messages sent by the PSAP are sent to the texter. 4. Verify all messages sent by the texter are received by the PSAP.
Text time	Text session 1 send to receive: Text session 2 send to receive:
Notes	<p>TWO SESSIONS ARE WITHIN SAME TTY SCREEN</p> <p>Texter's Location: Downey PD PSAP</p> <p>Test texts from 916-207-XXXX and 916-202-XXXX at 12:02:05</p> <p>Both texts received at Downey PD at 12:02:31</p> <p>916-207-XXXX on trunk 170 and 916-202-XXXX on trunk 235</p> <p>Call taker answered 916-207-XXXX and placed on hold immediately without reply.</p> <p>Call taker answered 916-202-XXXX and replied to texter then placed on hold.</p> <p>Call taker removed 916-207-XXXX from hold and was able to reply to the texter.</p> <p>Texter received reply and was able to respond to call taker.</p> <p>916-207-XXXX sent 4 spaces to 9-1-1 after the call taker took the texter off hold.</p> <p>Texter was able to send the call taker a new message without the call taker needing to initiate the conversation again and the new message was received on the TTY screen.</p> <p>Multiple text sessions present an issue as both conversations are presented within the same TTY screen and are mixed together.</p> <p>Call taker must click TTY Disable and TTY Active on the TTY screen in order to "toggle" between the sessions when taking them on and off hold.</p> <p>Cannot see messages from the texter if messages are sent while they are on hold.</p> <p>Messages that are sent while on hold are not stored to be displayed when texter is taken off hold, they are lost. Conversation between texter and call taker are only displayed when the texter is not on hold.</p> <p>Texters received blank messages and additional digits from call taker during periods when they were on hold and not being sent messages.</p> <p>End session initiated by Downey PD.</p>
Analysis	Did the TCC see 2 messages with dates in the contents from 916-202-XXXX?

CASE #5	Three simultaneous SMS Text to 911 from different texters, TCS TCC receives and provides routing instruction, 2 text Route to Downey PD, 1 text receives a Bounce Back Message
Objective/Description	This test verifies that TCC can process the scenario of initiating two dialogs from different texters with the delivery of the messages to Downey PD, and the third texter should receive a bounce back message. Downey PD provisioned with session limit of 2.
Resources	3 SMS Texters 2 9-1-1 Call Taker
Test Setup	1. Three Verizon Wireless mobile phones 2. Verify TCC is provisioned and ready with session limit of 2 3. Verify the target PSAP is available.
Procedure	1. Initiate three dialogs by sending a SMS to 911 from three different mobile handsets simultaneously. 2. Respond to the two incoming RFAs at the PSAP and send a few messages back and forth between the PSAP and mobile handsets. 3. PSAP ends Text session.
Verification	1. Verify that both RFAs are received by the PSAP configured for this test case. 2. Verify the transcript for each dialog is received by the PSAP. 3. Verify all messages sent by the PSAP are sent to the texter. 4. Verify all messages sent by the texter are received by the PSAP. 5. Verify third texter received a bounce back message
Text time	Text session 1 send to receive: Text session 2 send to receive: Bounce back message send to receive:
Notes	Texter's Location: Downey PD PSAP Test texts from 916-207-XXXX, 916-202-XXXX, and 949-677-XXXX at 12:21:00 Texts sent simultaneously to 9-1-1. 949-677-XXXX received at Downey PD at 12:21:18 916-207-XXXX received at Downey PD at 12:21:28 916-202-XXXX received bounce back at 12:22:11 End session initiated by Downey PD.
Analysis	

CASE #6	Text Conversation when device powered down powered back up
Objective/Description	This test verifies the text conversation continues even if the mobile phone is powered down and turned back on within 5 minutes.
Resources	Texter in field and centroid within Downey PD's jurisdiction 9-1-1 Call taker Timer
Test Setup	1. Mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Send SMS to 911 to initiate a dialog 2. Respond to the incoming RFA at the PSAP and send a few messages back and forth between the PSAP and mobile 3. Texter powers down mobile phone. 4. PSAP to send another text while phone is powered down. 5. Texter powers on phone after waiting 5 minutes 6. PSAP verifies original SMS conversation is up. 7. Texter sends SMS to continue same text session 8. Respond to the incoming RFA at the PSAP and send a few messages back and forth between the PSAP and texter. 9. PSAP ends text session
Verification	1. PSAP and texter verifies status of SMS conversation was continuous, verify no automatic message was delivered by PSAP or TCS because of time between text messages.
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP</p> <p>Test text sent from 916-202-XXXX at 12:25:21</p> <p>Received at call taker workstation at Downey PD at 12:25:49.</p> <p>Message sent back from Downey to texter and received by texter.</p> <p>Texter sends reply message to call taker.</p> <p>916-202-XXXX powered down phone.</p> <p>Call taker TTY screen disables as call taker is typing a message to the texter while the texter is powering off the phone.</p> <p>Phone is powered back up again.</p> <p>Texter sent another message to 9-1-1 once phone is powered back on again.</p> <p>The message does not go through on the call taker TTY screen, but call taker is able to hear tones.</p> <p>Texter receives the partial message that the call taker began before the TTY screen disabled.</p> <p>Texter sent 4 spaces to 9-1-1.</p> <p>Call taker does not receive message but is able to hear the tones.</p> <p>Texter sent 4 spaces and a text to 9-1-1.</p> <p>Call taker hears tones only and receives no message.</p> <p>Call taker placed the texter on hold.</p> <p>Texter sent 4 spaces again.</p> <p>Call taker could hear tones and was then able to reactivate the TTY screen, but received no message from the texter.</p> <p>End session initiated by CSULB.</p>
Analysis	

CASE #7	Texter initiates 9-1-1 text standing inside Downey PD's Jurisdiction but the centroid of the cell tower is in different PSAP's jurisdiction
Objective/Description	This test verifies that the 9-1-1 SMS texter will receive a bounce back message when centroid is outside PSAP's jurisdiction.
Resources	1. SMS 9-1-1Texter inside Downey PD's jurisdiction but centroid outside Downey PD's jurisdiction 1. 9-1-1 Call Taker
Test Setup	1. One mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Initiate an SMS 9-1-1 text.
Verification	1. Verify that a bounce back message was received
Text time	Send to receive:
Notes	Skip this test case. This test will be performed at Long Beach PD for the TTY solution. This test case was also verified at CSULB PD.
Analysis	

CASE #8	Texter initiates 9-1-1 text standing outside Downey PD's jurisdiction but the centroid of the cell tower is in Downey PD's jurisdiction
Objective/Description	This test verifies that the 9-1-1 SMS text will be delivered to Downey PD.
Resources	1. SMS 9-1-1Texter outside Downey PD's jurisdiction but centroid inside Downey PD's jurisdiction. 1. 9-1-1 Call Taker
Test Setup	1. One mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Initiate an SMS 9-1-1 text. 2. PSAP respond back to texter 3. Exchange a few text 4. PSAP end text session
Verification	1. Verify that 9-1-1 SMS text is received by Downey PD 2. Verify the transcript for each dialog is received by the PSAP 3. Verify all messages sent by the PSAP are sent to the texter. 4. Verify all messages sent by the texter are received by the PSAP.
Text time	Send to receive:
Notes	Skip this test case. This test will be performed at Long Beach PD for the TTY solution. This test case was also verified at CSULB PD.
Analysis	

CASE #9	Add number to Deny List
Objective/Description	This test verifies when a number is added to the deny list they will receive a bounce back message
Resources	SMS 9-1-1 texter from 916-207-XXXX 9-1-1 Call taker
Test Setup	<ol style="list-style-type: none"> 1. One mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available. 4. Log into the GEM911 Admin tool
Procedure	<ol style="list-style-type: none"> 1. Texter 916-207-XXXX to send text to PSAP 2. PSAP sends text back to texter and ends session 3. Add 916-207-XXXX to the deny list 4. Initiate an SMS 9-1-1 text from 916-207-XXXX
Verification	<ol style="list-style-type: none"> 1. Verify first text from 916-207-XXXX was received by PSAP 2. Verify that 9-1-1 SMS texter receives a bounce back message after 916-207-XXXX is added to the deny list.
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP</p> <p>Downey PD added 916-207-XXXX to the deny list via the GEM admin tool set from 01/08/14 12:38:00 to 01/08/14 12:57:00.</p> <p>Test text from 916-207-XXXX at 12:38:09, following the addition to the deny list.</p> <p>Standard bounce back message was received by the texter at 12:38:25.</p> <p>Downey PD removed the number from the deny list.</p>
Analysis	

CASE #10	Time of Day Setting
Objective/Description	This test verifies when a time of day rule is added to the PSAP PRF subscriber will receive a bounce back message
Resources	SMS 9-1-1 texter from 916-207-XXXX 9-1-1 Call taker
Test Setup	1. One mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Setup PSAP for Time of Day Rule through the GEM9-1-1 Admin Tool - close PSAP for Monday , 1/6/14 from current time until midnight. 2. Initiate an SMS 9-1-1 text
Verification	1. Verify that 9-1-1 SMS texter receives a bounce back message
Text time	Send to receive:
Notes	Texter's Location: Downey PD PSAP Downey PD and TCS initiated a time of day rule via the GEM admin tool on Monday 01/06/14 after initial call through testing. Downey PD sent a test text during the time of day rule active timeframe and received a bounce back message. Time of day rule was removed for this test set on 01/08/14.
Analysis	

CASE #11	Verify ability for second call taker to take over SMS text session
Objective/Description	This test verifies that a second call taker at Downey PD can take over a text session from initial call taker
Resources	Texter in field and centroid within Downey PD's jurisdiction Call taker to receive text Second call taker available to take over text TCS to monitor text session
Test Setup	1. Verify Texter is ready 2. Verify the target PSAP is available.
Procedure	1. Send SMSText message to 9-1-1 2. Downey PD to reply to Texter 3. Exchange a few texts 4. Have second call taker at Downey PD take over text session from another call taker position 5. Have second call taker exchange a few texts 6. Have Downey PD end text session
Verification	1. Verify text was received by first call taker 2. Verify second call taker is able to takeover text session 3. Verify second call taker can see the entire text session 3. Verify release message received by Texter.
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP Test text from 916-207-XXXX Texter sent "Test 36". Received by call taker 1 at Downey PD. Call taker 1 replied "911 need police fire ambulance q ga". Texter received. Call taker 2 took over the line and the text conversation. Texter sent "Test 37". Both call takers received "Test 37" on their workstations. Call taker 2 sent "Calm down" and both call taker 1 and the texter received the message. Call taker 1 sent "Tow vesta open" and call taker 2 and texter received the message. Call taker sent "Ok will do" and call taker 1 and texter received the message. End session initiated by Downey PD.</p> <p>This session acted as a conference call, with both call takers active on the text session at the same time. May want to redo this test with call taker 1 placing the texter on hold prior to call taker 2 picking up the session.</p>
Analysis	

CASE #12	Verify bounce back message received when both trunks are out of service
Objective/Description	This test verifies SMS texter will receive a bounce back message if both trunks are out of service (Downey PD text limit is set at two)
Resources	Texter in field and centroid within Downey PD's jurisdiction. Call taker to receive text TCS to monitor text session Verizon translation team
Test Setup	1. Verify Texter is ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available 4. Verify Verizon translation team ready
Procedure	1. Verizon translation team to take both trunks out of service 2. Texter places SMS text to 9-1-1
Verification	1. Verify the bounce back message is received by the texter
Text time	Send to receive:
Notes	Verizon technician removed both of the trunk cards for the two test trunks being utilized for the text-to-9-1-1 tests. Texter's Location: Downey PD PSAP Test text from 916-207-XXXX. Standard bounce back message was received by the texter. Verizon technician placed both trunks back into service.
Analysis	

CASE #13	Verify transfer capability from CSU Long Beach PD to Downey PD
Objective/Description	This test will determine if a texter can be transferred from a GEM 911 PSAP to a Standard TTY PSAP
Resources	<p>Texter in field and centroid within CSU Long Beach PD's jurisdiction.</p> <p>2 mobile phones (one with location agent and one without)</p> <p>Call taker at CSU Long Beach to receive text</p> <p>Call taker at Downey PD to receive text</p> <p>TCS to monitor text session</p> <p>Timer to time send receive time</p>
Test Setup	<ol style="list-style-type: none"> 1. Mobile phones (one with Location Agent active) and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAPs are available.
Procedure	<ol style="list-style-type: none"> 1. Send an SMS text to 9-1-1 to initiate a text session at CSU Long Beach. 2. PSAP sends response to initial text – and exchange a few texts. 3. Texter drives to Downey to allow initiation of rebid in Downey PD's jurisdiction 4. Texter let's text team know when they are in place in Downey's jurisdiction with centroid in Downey's Jurisdiction. 5. CSU Long Beach PD call taker requests a rebid 6. CSU Long Beach PD should now see the transfer button available in GEM911 7. CSU Long Beach PD will need to call Downey PD to let them know they will be sending a text session to them 8. CSU Long Beach PD sends texter a text saying they will be transferring texter to Downey PD 9. CSU Long Beach PD call taker clicks the transfer button (we assume text will automatically transfer 10. Texter sends another text 11. That text should arrive at Downey PD 12. Downey PD replies to text (they exchange a few text) 13. Downey PD ends text session.
Verification	<ol style="list-style-type: none"> 1. Verify the initial SMS text was received by CSU Long Beach PD 2. Verify transfer button activates and transfer took place 3. Verify the transcript is received by both PSAPs 4. Verify texter received all messages and verify PSAPs received all messages
Text time	Send to receive:
Notes	<p>Texter's Location: Began at CSULB PD PSAP and drove to Downey PD PSAP with two open text sessions active at CSULB PD.</p> <p>Test text sent from 949-677-XXXX (HTC One) and ____-____-____ (Verizon flip phone).</p> <p>Received at CSULB PD in GEM.</p> <p>Call taker left both sessions open with the texter showing location in CSULB PD jurisdiction for both phones.</p> <p>Texter drove to Downey PD PSAP with both phones.</p> <p>When texter arrived at Downey PD, CSULB PD performed a rebid on both text sessions.</p> <p>CSULB PD received precise location for 949-677-XXXX and course location for ____-____-____.</p> <p>Both updated locations showed the texter located within DOWNEY PD's jurisdiction.</p> <p>Upon updated location received at CSULB PD in GEM, the transfer button became active.</p> <p>CSULB call taker transferred the 949-677-XXXX session to Downey PD.</p> <p>Downey PD received the session from CSULB at 11:06:40.</p> <p>Call taker received "Test" in TTY screen, which was the first message sent by texter.</p> <p>Downey PD call taker and texter exchanged several messages.</p> <p>Messages sent by call taker are echoing back on the call taker TTY screen, so call taker sees their own</p>

	<p>message typed back to them. Call taker receives messages from texter only once without the echo.</p> <p>The session disappeared off of the CSULB PD GEM screen and could no longer be responded to by CSULB PD once the session was transferred to Downey PD.</p> <p>Downey PD call taker rebid for updated location. Location received: 33.94130500, -118.128819, uncertainty 8 meter. Call taker mapped the location in CAD and appeared accurate within the Downey PD PSAP. Call taker places text session on hold and texter sent a message. Call taker could not reactivate text session once taken off hold. Call taker placed session back on hold. Texter sent 4 spaces, reactivated the TTY screen again. Call taker made a test text call at the same time and placed the call on hold. Call taker again could not reactivate text session once taken off hold. Call taker sent 4 spaces on her test text session and the TTY screen reactivated. End session initiated by Downey PD at about 11:25:40. (This behavior may be CPE specific, same must be tested on various CPE to verify.)</p> <p>CSULB call taker transferred the ____ - ____ - ____ session to Downey PD. Downey PD received the session from CSULB at 11:27:45. Text answered by another dispatcher prior to second ring, so there was no ANI and no ALI available for a rebid at the Downey PD location. Transfer worked but session was ended by Downey PD immediately.</p> <p>Did not test reverse direction of this test.</p>
Analysis	

CASE #13B	Verify transfer capability from Downey PD to Downey Fire
Objective/Description	This test will determine if a texter can be transferred from a Standard TTY PSAP to a non-text deployed secondary PSAP
Resources	<p>Texter in field and centroid within Downey PD and Downey Fire's jurisdiction.</p> <p>1 mobile phone</p> <p>Call taker at Downey PD to receive text</p> <p>Call taker at Downey Fire to receive text</p> <p>TCS to monitor text session</p> <p>Timer to time send receive time</p>
Test Setup	<ol style="list-style-type: none"> 1. Mobile phone ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAPs are available.
Procedure	<ol style="list-style-type: none"> 1. Send an SMS text to 9-1-1 to initiate a text session at Downey PD 2. PSAP sends response to initial text – and exchange a few texts 3. Downey PD call taker requests a rebid 4. Downey PD will need to call Downey Fire to let them know they will be sending a text session to them 5. Downey PD sends texter a text saying they will be transferring texter to Downey Fire 6. Downey PD call taker transfers texter to Downey Fire using star code transfer 7. Texter sends another text 8. That text should arrive at Downey Fire 9. Downey Fire replies to text (they exchange a few text) 10. Downey Fire ends text session
Verification	<ol style="list-style-type: none"> 1. Verify the initial SMS text was received by Downey PD 2. Verify transfer took place 3. Verify the transcript is received by both PSAPs 4. Verify texter received all messages and verify PSAPs received all messages
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP.</p> <p>Test text sent from ____-____-____</p> <p>Received at call taker workstation at Downey PD.</p> <p>Call taker and texter exchange messages.</p> <p>Call taker informed Downey Fire that a text was going to be transferred to them via TTY.</p> <p>Call taker transferred the text call to Downey Fire using a star code transfer.</p> <p>Received at Downey Fire as a transfer.</p> <p>Downey Fire received call as an open line and launched their TTY screen manually (screen launched before or after transfer??)</p> <p>Downey Fire received no initial text or text history on transfer, only a blank TTY screen.</p> <p>Downey Fire and texter exchanged several messages.</p> <p>Downey PD did not drop the line and call taker was able to see both messages sent by the texter and by Downey Fire after the transfer within the TTY screen.</p> <p>End session initiated by Downey Fire/Downey PD?? (both??)</p> <p>Did not test with Downey PD dropping off the call.</p> <p>Did not test with Downey PD adding a response to the texter after the transfer.</p>
Analysis	

CASE #14	Verify results when texter sends more than 160 characters
Objective/Description	This test will indicate the results when a text is sent with over 160 characters
Resources	Texter in field and centroid within Downey PD's jurisdiction. Call taker to receive text TCS to monitor text session Timer to time send receive time
Test Setup	1. Mobile phone activated and ready 2. Verify TCC is provisioned and ready 3. Verify the target PSAP is available.
Procedure	1. Send the following text message: Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. Which totals 380 characters. 2. PSAP sends response to initial text. 3. Texter sends text containing following symbols embedded in the text: @ # % & 4. Downey PD call taker ends text session 5. If screen shot is available please ask call taker to print the screen
Verification	1. Verify the initial SMS text was received by the PSAP 2. Verify the transcript is received by the PSAP 3. Verify texter received the disconnect session text from PSAP
Text time	Send to receive:
Notes	<p>Texter's Location: Downey PD PSAP Test text sent from 916-202-XXXX Received via TTY at Downey PD. Call taker received the complete text of the above as one message. The same text then repeated itself two more times, but were truncated and did not send the entire message the second and third time it displayed on the call taker TTY screen. Texter replied again sending the following characters: @#%& Call taker received only four asterisk signs, no special characters received. End session initiated by Downey PD.</p> <p>TTY is half duplex – have texter and call taker send text messages at the same. This was not performed. Have texter send 5 texts messages (one right after another) with no response from call taker. This was not performed.</p> <p>When the call taker hits the enter key to drop the cursor down in the TTY screen, the texter receives a message from 9-1-1 that is blank.</p>
Analysis	

CASE #15	Verify text session are available in ECaTS
Objective/ Description	This test will determine if a PSAP using Standard TTY test sessions appear in ECaTS
Resources	ECaTS
Test Setup	None
Procedure	1. Log into ECaTS pull RAW data for 1-8-2013 for Downey PD
Verification	1. Verify SMS 9-1-1 Text to 9-1-1 was recorded 2. Verify the transcript is received by the PSAP when the dialog connected
Text time	Send to receive:
Notes	TTY text sessions are available in ECaTS
Analysis	ECaTS transcript follows communications between call taker and texter